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TO : The Files

DOC	115	REV DATE	1 APR 1980	BY	064540
ORIG COMP	033	OPI	56	TYPE	02
ORIG CLASS	5	PAGES	2	REV CLASS	C
JUST	22	NEXT REV	2010	AUTH:	HR 10-2

FROM :

SUBJECT: (Trip Report on Contract RD-107, Task Order 4) 14 DEC 56)

1. On 14 December 1956, a meeting was held at [redacted] to discuss the subject contract.

Present at the meeting were:

[redacted]

CIA

2. [redacted] concurred that there appeared to be five advantages to the use of ferrite antennas:

- [redacted] of long, thin rods versus loops.
- Greater directivity makes possible the elimination of certain interference sources.
- Higher power gain for very narrowband width but here the designer must guard against a bandwidth so narrow that the circuit will "ring".
- When comparing very small loops, i.e. air core loop diameter of less than 6 inches and ferrite rod length of less than 6 inches, the ferrite antenna will be more sensitive.
- The ferrite antenna should theoretically be less sensitive to attenuation [redacted]

3. [redacted] is planning to go to Europe for the period of 11 January to 11 February 1957. [redacted] is being transferred to another division of [redacted] It is therefore expected that the final report will be written before 28 December 1956. Unfortunately, time did not permit a review of the material which will appear in the final report.

4. [redacted]

The use of such a rod would theoretically double the gain obtained with the [redacted] ferrite and make the gain of the ferrite antenna approximately equal to that of the equivalent air core loop antenna.

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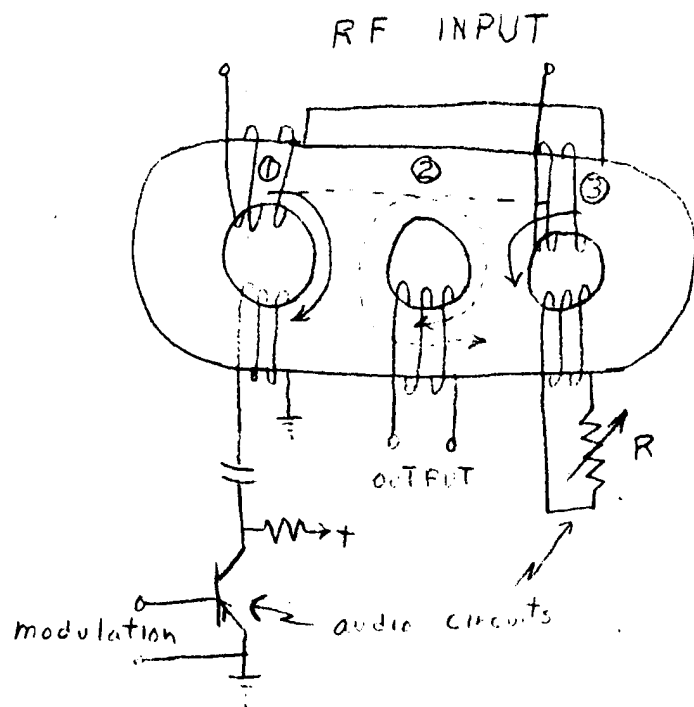
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Fig. 1.

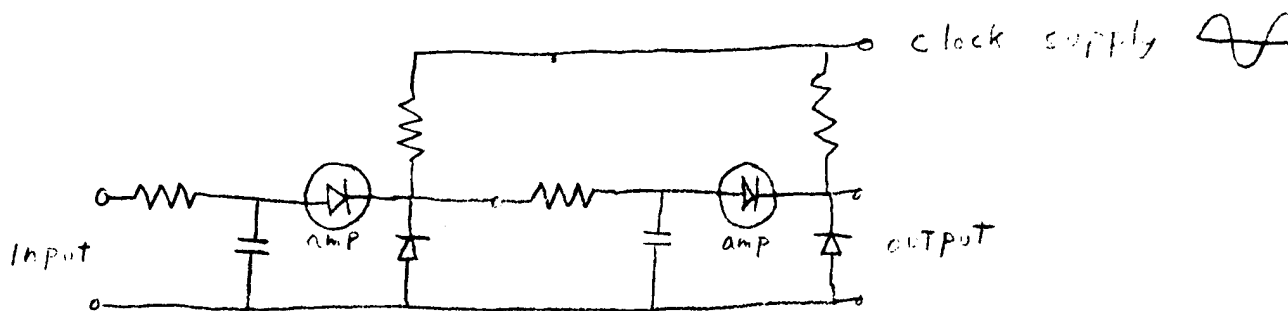


Fig. 2

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